

# Work Order ID 97023

\*97023\*

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February-14-13 1:10:38 PM

Item ID: D412-682-001

Accept

\*N900040100\*

Setup Start \*NS1\*

Revision ID:

Stop \*NS2\*

Item Name: Support Beam

Start Date: 2/13/13 Start Qty: 1.00 \*1\*

Cust Item ID:

Required Date: 2/20/13 Req'd Qty: 1.00 \*1\*

Customer:

Reference:

Approvals: Process Plan: ML5 Date: 13-02-15 Tooling: \_\_\_\_\_ Date: \_\_\_\_\_

Run Start \*NR1\*

QC: \_\_\_\_\_ Date: \_\_\_\_\_ SPC (Y/N): \_\_\_\_\_ Date: \_\_\_\_\_

Stop \*NR2\*

Sequence ID/ Work Center ID	Operation Description	Set Up/ Run Hours	Tool ID	Tool #	Plan Code	Accept Qty	Reject Qty	Reject Number	Insp. Stamp
<b>Draw Nbr</b>	<b>Revision Nbr</b>								
IIN-D412-682	Rev D								
100		0.00							
<b>*100*</b>	DOCUMENT CONTROL								
DC	Memo	0.00							
Document Control	Photocopy bluefile & type labels per PPPD412-682-001		CHG001						
130	Pick Kit	0.00							
<b>*130*</b>									
Packaging	Memo	0.00							
Packaging	Pick Packing Kit*****Ensure original Bell ARC and Tags are packaged in kit*****								
140	QC4- 100% Inspect kits for completeness	0.00							
<b>*140*</b>									
QC	Memo	0.00							
Quality Control									

ML5 14-01-29

1x

DAS  
6  
9-89

14-1-30

DAS  
26  
9-89

1x 14-1-29

DAS  
6  
9-89

14-1-30

1x

NCR: Yes / No

## WORK ORDER NON-CONFORMANCE / UPDATE

DQA: \_\_\_\_\_ Date: \_\_\_\_\_

QA Closed: \_\_\_\_\_ Date: \_\_\_\_\_

Work Order: _____  Part No. _____  NCR No. _____	<b>DISPOSITION</b>  Rework <input type="checkbox"/> Scrap <input type="checkbox"/> Use-as-is <input type="checkbox"/> Work Order Update <input type="checkbox"/>	<b>AGAINST DEPARTMENT/PROCESS</b>  <table style="width: 100%;"> <tr> <td>Skid-tube <input type="checkbox"/></td> <td>Crosstube <input type="checkbox"/></td> <td>Water Jet <input type="checkbox"/></td> <td>Engineering <input type="checkbox"/></td> </tr> <tr> <td>Machining <input type="checkbox"/></td> <td>Small Fab <input type="checkbox"/></td> <td>Prod. Eng. Coord. <input type="checkbox"/></td> <td>Quality <input type="checkbox"/></td> </tr> <tr> <td>Thermoforming <input type="checkbox"/></td> <td>Finishing <input type="checkbox"/></td> <td>Rec/Store/Packaging <input type="checkbox"/></td> <td>Other <input type="checkbox"/></td> </tr> <tr> <td>Large Fab <input type="checkbox"/></td> <td>Composite <input type="checkbox"/></td> <td>Supplier <input type="checkbox"/></td> <td></td> </tr> </table>	Skid-tube <input type="checkbox"/>	Crosstube <input type="checkbox"/>	Water Jet <input type="checkbox"/>	Engineering <input type="checkbox"/>	Machining <input type="checkbox"/>	Small Fab <input type="checkbox"/>	Prod. Eng. Coord. <input type="checkbox"/>	Quality <input type="checkbox"/>	Thermoforming <input type="checkbox"/>	Finishing <input type="checkbox"/>	Rec/Store/Packaging <input type="checkbox"/>	Other <input type="checkbox"/>	Large Fab <input type="checkbox"/>	Composite <input type="checkbox"/>	Supplier <input type="checkbox"/>	
Skid-tube <input type="checkbox"/>	Crosstube <input type="checkbox"/>	Water Jet <input type="checkbox"/>	Engineering <input type="checkbox"/>															
Machining <input type="checkbox"/>	Small Fab <input type="checkbox"/>	Prod. Eng. Coord. <input type="checkbox"/>	Quality <input type="checkbox"/>															
Thermoforming <input type="checkbox"/>	Finishing <input type="checkbox"/>	Rec/Store/Packaging <input type="checkbox"/>	Other <input type="checkbox"/>															
Large Fab <input type="checkbox"/>	Composite <input type="checkbox"/>	Supplier <input type="checkbox"/>																

Root Cause	Date	Step	Qty	Description of work order update or Non-conformance	Initial Chief Eng	Action Description	Sign & Date	Verification	QC Inspector
Doc/Data <input type="checkbox"/>									
Equip/Tooling <input type="checkbox"/>									
Operator <input type="checkbox"/>									
Material <input type="checkbox"/>									
Setup <input type="checkbox"/>									
Other <input type="checkbox"/>									
Process <input type="checkbox"/>									
Supplier <input type="checkbox"/>									
Training <input type="checkbox"/>									
Unapproved <input type="checkbox"/>									

### FAULT CATEGORY

<b>Landing Gear</b> <input type="checkbox"/> Bending <input type="checkbox"/> Centre Not Concentric to O/S <input type="checkbox"/> Cracks <input type="checkbox"/> Crushed/Crimped <input type="checkbox"/> Cuffs <input type="checkbox"/> Heat Treat <input type="checkbox"/> Inspection Strip in Tube <input type="checkbox"/> Ripples in Bend <input type="checkbox"/> Torque Waves in Extrusion <input type="checkbox"/> Turning Sequence <input type="checkbox"/> Wave/Twist in Tube	<b>General</b> <input type="checkbox"/> Bend <input type="checkbox"/> BOM/Route <input type="checkbox"/> Broken/Damaged <input type="checkbox"/> Burrs <input type="checkbox"/> Contamination <input type="checkbox"/> Countersink <input type="checkbox"/> Cut Too Short <input type="checkbox"/> Drill Holes <input type="checkbox"/> Drawing <input type="checkbox"/> Finish <input type="checkbox"/> Folio	<input type="checkbox"/> Grain <input type="checkbox"/> Hardware <input type="checkbox"/> Inspection Incomplete <input type="checkbox"/> Instructions Incomplete/Unclear <input type="checkbox"/> Maintenance <input type="checkbox"/> Mislabeled <input type="checkbox"/> Misread <input type="checkbox"/> Offset <input type="checkbox"/> Out of Calibration <input type="checkbox"/> Out of Sequence <input type="checkbox"/> Outside Dimensions  <input type="checkbox"/> Ovalized <input type="checkbox"/> Over/Under tolerance <input type="checkbox"/> Part Incorrect <input type="checkbox"/> Part Lost/Missing <input type="checkbox"/> Part Moved <input type="checkbox"/> Positioned Wrong <input type="checkbox"/> Power Loss/Surge  <input type="checkbox"/> Pressure/Forced <input type="checkbox"/> Temperature/Cure <input type="checkbox"/> Weld <input type="checkbox"/> Wrong Stock Pulled  <input type="checkbox"/> Other
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# Work Order ID 97023

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Item ID: D412-682-001

Accept

\*N900040100\*

Setup Start \*NS1\*

Revision ID:

Stop \*NS2\*

Item Name: Support Beam

Start Date: 2/13/13 Start Qty: 1.00 \*1\*

Cust Item ID:

Required Date: 2/20/13 Req'd Qty: 1.00 \*1\*

Customer:

Reference:

Approvals: Process Plan: \_\_\_\_\_ Date: \_\_\_\_\_ Tooling: \_\_\_\_\_ Date: \_\_\_\_\_

Run Start \*NR1\*

QC: \_\_\_\_\_ Date: \_\_\_\_\_ SPC (Y/N): \_\_\_\_\_ Date: \_\_\_\_\_

Stop \*NR2\*

Sequence ID/ Work Center ID	Operation Description	Set Up/ Run Hours	Tool ID	Tool #	Plan Code	Accept Qty	Reject Qty	Reject Number	Insp. Stamp
150	Packaging	0.00							
*150*									
Packaging	Memo	0.00							
Packaging	Identify and pack for shipping as per PPPD412-682-001								
	Location: <u>FG-089A</u>								
	PPP Rev: _____								
160	QC21- Final Inspection - Work Order Release	0.00							
*160*									
QC	Memo	0.00							
Quality Control									

1 8 14-01-30

MLS 14-02-04

14-01-30

NCR: Yes / No

**WORK ORDER NON-CONFORMANCE / UPDATE**

DQA: \_\_\_\_\_ Date: \_\_\_\_\_

QA Closed: \_\_\_\_\_ Date: \_\_\_\_\_

Work Order: _____  Part No. _____  NCR No. _____				<b>DISPOSITION</b>  Rework <input type="checkbox"/> Scrap <input type="checkbox"/> Use-as-is <input type="checkbox"/> Work Order Update <input type="checkbox"/>		<b>AGAINST DEPARTMENT/PROCESS</b>  <div style="display: flex; justify-content: space-between;"> <div>           Skid-tube <input type="checkbox"/>            Machining <input type="checkbox"/>            Thermoforming <input type="checkbox"/>            Large Fab <input type="checkbox"/> </div> <div>           Crosstube <input type="checkbox"/>            Small Fab <input type="checkbox"/>            Finishing <input type="checkbox"/>            Composite <input type="checkbox"/> </div> <div>           Water Jet <input type="checkbox"/>            Prod. Eng. Coord. <input type="checkbox"/>            Rec/Store/Packaging <input type="checkbox"/>            Supplier <input type="checkbox"/> </div> <div>           Engineering <input type="checkbox"/>            Quality <input type="checkbox"/>            Other <input type="checkbox"/> </div> </div>					
<b>Root Cause</b>	<b>Date</b>	<b>Step</b>	<b>Qty</b>	<b>Description of work order update or Non-conformance</b>	<b>Initial Chief Eng</b>	<b>Action Description</b>	<b>Sign &amp; Date</b>	<b>Verification</b>	<b>QC Inspector</b>		
Doc/Data <input type="checkbox"/>											
Equip/Tooling <input type="checkbox"/>											
Operator <input type="checkbox"/>											
Material <input type="checkbox"/>											
Setup <input type="checkbox"/>											
Other <input type="checkbox"/>											
Process <input type="checkbox"/>											
Supplier <input type="checkbox"/>											
Training <input type="checkbox"/>											
Unapproved <input type="checkbox"/>											

FAULT CATEGORY				
<b>Landing Gear</b> <input type="checkbox"/> Bending <input type="checkbox"/> Centre Not Concentric to O/S <input type="checkbox"/> Cracks <input type="checkbox"/> Crushed/Crimped <input type="checkbox"/> Cuffs <input type="checkbox"/> Heat Treat <input type="checkbox"/> Inspection Strip in Tube <input type="checkbox"/> Ripples in Bend <input type="checkbox"/> Torque Waves in Extrusion <input type="checkbox"/> Turning Sequence <input type="checkbox"/> Wave/Twist in Tube	<b>General</b> <input type="checkbox"/> Bend <input type="checkbox"/> BOM/Route <input type="checkbox"/> Broken/Damaged <input type="checkbox"/> Burrs <input type="checkbox"/> Contamination <input type="checkbox"/> Countersink <input type="checkbox"/> Cut Too Short <input type="checkbox"/> Drill Holes <input type="checkbox"/> Drawing <input type="checkbox"/> Finish <input type="checkbox"/> Folio	<input type="checkbox"/> Grain <input type="checkbox"/> Hardware <input type="checkbox"/> Inspection Incomplete <input type="checkbox"/> Instructions Incomplete/Unclear <input type="checkbox"/> Maintenance <input type="checkbox"/> Mislabeled <input type="checkbox"/> Misread <input type="checkbox"/> Offset <input type="checkbox"/> Out of Calibration <input type="checkbox"/> Out of Sequence <input type="checkbox"/> Outside Dimensions	<input type="checkbox"/> Ovalized <input type="checkbox"/> Over/Under tolerance <input type="checkbox"/> Part Incorrect <input type="checkbox"/> Part Lost/Missing <input type="checkbox"/> Part Moved <input type="checkbox"/> Positioned Wrong <input type="checkbox"/> Power Loss/Surge	<input type="checkbox"/> Pressure/Forced <input type="checkbox"/> Temperature/Cure <input type="checkbox"/> Weld <input type="checkbox"/> Wrong Stock Pulled  <input type="checkbox"/> Other

# Picklist Print

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Page 1

Work Order ID: 97023

Parent Item: D412-682-001

Parent Item Name: Support Beam

Start Date: 2/13/13

Required Date: 2/20/13

Start Qty: 1.00

Required Qty: 1.00

Comments: IPP rev A 08.03.19 new issue EC verified by DD

Component Item ID/ Item Name	Replacement Item ID	Mfg/ Purch	Bin Item	Primary Location	Last Location	Route Seq ID	Unit of Measure	Qty on Hand	Qty per Kit	Total Qty	Qty Issued	Date Issued	Status
604-028-001	DAS 6	Purchased	No			110	Each	0.0000	1	1			DAS 26 9-89
412 Bolt (412-050-008-101)	9-89												
604-030-001	DAS 6	Purchased	No			110	Each	0.0000	1	1			DAS 26 9-89
412 Rocker beam (412-050-003-109)	9-89												
AN320-8	9-89	Purchased	No			110	Each	31.0000	1	1			DAS 26 9-89
Nut	DAS 6 9-89												DAS 26 9-89
				<u>Location</u>		<u>Loc Qty</u>		<u>Loc Code</u>					
				ST343		31							
				106552		31							
MS24665-285	DAS 6 9-89	Purchased	No			110	Each	96.0000	1	1			DAS 26 9-89
Cotter Pins													
				<u>Location</u>		<u>Loc Qty</u>		<u>Loc Code</u>					
				ST299		96							
				9003		96							
NAS1149F0832P		Purchased	No			110	Each	239.0000	1	1			DAS 26 9-89
WASHER	DAS 6 9-89												
				<u>Location</u>		<u>Loc Qty</u>		<u>Loc Code</u>					
				ST295		239							
				18057		239							

① m/2690L

① m/2690L

/X

/X

14-1-29

/X

NCR: Yes / No

## WORK ORDER NON-CONFORMANCE / UPDATE

DQA: \_\_\_\_\_ Date: \_\_\_\_\_

QA Closed: \_\_\_\_\_ Date: \_\_\_\_\_

Work Order: _____  Part No. _____  NCR No. _____				<b>DISPOSITION</b>  Rework <input type="checkbox"/> Scrap <input type="checkbox"/> Use-as-is <input type="checkbox"/> Work Order Update <input type="checkbox"/>		<b>AGAINST DEPARTMENT/PROCESS</b>  <div style="display: flex; justify-content: space-between;"> <div>           Skid-tube <input type="checkbox"/>            Machining <input type="checkbox"/>            Thermoforming <input type="checkbox"/>            Large Fab <input type="checkbox"/> </div> <div>           Crosstube <input type="checkbox"/>            Small Fab <input type="checkbox"/>            Finishing <input type="checkbox"/>            Composite <input type="checkbox"/> </div> <div>           Water Jet <input type="checkbox"/>            Prod. Eng. Coord. <input type="checkbox"/>            Rec/Store/Packaging <input type="checkbox"/>            Supplier <input type="checkbox"/> </div> <div>           Engineering <input type="checkbox"/>            Quality <input type="checkbox"/>            Other <input type="checkbox"/> </div> </div>					
Root Cause	Date	Step	Qty	Description of work order update or Non-conformance	Initial Chief Eng	Action Description	Sign & Date	Verification	QC Inspector		
Doc/Data											
Equip/Tooling											
Operator											
Material											
Setup											
Other											
Process											
Supplier											
Training											
Unapproved											

FAULT CATEGORY				
<b>Landing Gear</b> <input type="checkbox"/> Bending <input type="checkbox"/> Centre Not Concentric to O/S <input type="checkbox"/> Cracks <input type="checkbox"/> Crushed/Crimped <input type="checkbox"/> Cuffs <input type="checkbox"/> Heat Treat <input type="checkbox"/> Inspection Strip in Tube <input type="checkbox"/> Ripples in Bend <input type="checkbox"/> Torque Waves in Extrusion <input type="checkbox"/> Turning Sequence <input type="checkbox"/> Wave/Twist in Tube	<b>General</b> <input type="checkbox"/> Bend <input type="checkbox"/> BOM/Route <input type="checkbox"/> Broken/Damaged <input type="checkbox"/> Burrs <input type="checkbox"/> Contamination <input type="checkbox"/> Countersink <input type="checkbox"/> Cut Too Short <input type="checkbox"/> Drill Holes <input type="checkbox"/> Drawing <input type="checkbox"/> Finish <input type="checkbox"/> Folio	<input type="checkbox"/> Grain <input type="checkbox"/> Hardware <input type="checkbox"/> Inspection Incomplete <input type="checkbox"/> Instructions Incomplete/Unclear <input type="checkbox"/> Maintenance <input type="checkbox"/> Mislabeled <input type="checkbox"/> Misread <input type="checkbox"/> Offset <input type="checkbox"/> Out of Calibration <input type="checkbox"/> Out of Sequence <input type="checkbox"/> Outside Dimensions	<input type="checkbox"/> Ovalized <input type="checkbox"/> Over/Under tolerance <input type="checkbox"/> Part Incorrect <input type="checkbox"/> Part Lost/Missing <input type="checkbox"/> Part Moved <input type="checkbox"/> Positioned Wrong <input type="checkbox"/> Power Loss/Surge  <input type="checkbox"/> Pressure/Forced <input type="checkbox"/> Temperature/Cure <input type="checkbox"/> Weld <input type="checkbox"/> Wrong Stock Pulled  <input type="checkbox"/> Other	

REFERENCE ONLY

STANDARD WEARPLATES

Qty -001	Qty -011	Qty -011B	Qty -013	Qty -015	Qty -021	Qty -025	Qty -035	Qty -111	Qty -111B	Qty -113	Qty -115	Qty -117	Part Number	Description
X													D412-682-001*	SUPPORT BEAM KIT
	X												D212-682-011	LANDING GEAR KIT HIGH, 205/210/212
		X											D212-682-011B	LANDING GEAR KIT HIGH, 214
			X										D212-682-013	LANDING GEAR KIT HIGH, 204
				X									D412-682-015	LANDING GEAR KIT HIGH, 412
					X								D212-682-021	LANDING GEAR KIT, 205/210/212, APICAL FLOAT COMPATIBLE
						X							D412-682-025	LANDING GEAR KIT, 412, APICAL FLOAT COMPATIBLE
							X						D412-682-035	LANDING GEAR KIT, 412, OEM/APICAL FLOAT COMPATIBLE
								X					D212-682-111	LANDING GEAR KIT STANDARD, 205/210/212
									X				D212-682-111B	LANDING GEAR KIT STANDARD, 214
										X			D212-682-113	LANDING GEAR KIT STANDARD, 204
											X		D412-682-115	LANDING GEAR KIT STANDARD, 412
												X	D412-682-117	LANDING GEAR KIT LOW NARROW, 412
	1		1	1	1	1	1						D212-664-101	CROSSTUBE FWD HIGH, 204/205/210/212/412
		1											D212-664-101B	CROSSTUBE FWD HIGH, 214
								1		1	1		D212-664-107	CROSSTUBE FWD STANDARD, 204/205/210/212/412
									1				D212-664-107B	CROSSTUBE FWD STANDARD, 214
	1		1		1								D212-664-201	CROSSTUBE AFT HIGH, 204/205/210/212
		1											D212-664-201B	CROSSTUBE AFT HIGH, 214
								1		1			D212-664-207	CROSSTUBE AFT STANDARD, 204/205/210/212
									1				D212-664-207B	CROSSTUBE AFT STANDARD, 214
											1		D412-664-209	CROSSTUBE AFT STANDARD, 412
				1		1	1					1	D412-664-105	CROSSTUBE FWD LOW NARROW, 412
												1	D412-664-203	CROSSTUBE AFT HIGH, 412
													D412-664-205	CROSSTUBE AFT LOW NARROW, 412
	2	2		2				2	2		2	2	D205-634-011	SKIDTUBE, 205/210/212/214/412
			2							2			D204-635-011	SKIDTUBE, 204
							2						D412-742-011	FLOAT SKIDTUBE, OEM/APICAL, 412
					2	2							D412-742-013	FLOAT SKIDTUBE, APICAL, 205/210/212/412
1													412-050-003-113	SUPPORT BEAM ASSEMBLY (OR AAI P/N 604-030-001)
1													412-050-008-101	BOLT (OR AAI P/N 604-028-001)
1													AN320-8	NUT
1													MS24665-285	COTTER PIN (OR AN380-3-4)
1													NAS1149F0832P	WASHER

\*CUSTOMERS THAT REQUIRE THE SUPPORT BEAM ASSEMBLY ON 412 AIRCRAFT CAN PROCURE THE D412-682-001 SUPPORT BEAM KIT

F	ADD -211/-211B/-213/-215/-311/-311B/-313/-315/-317	RF	11.09.22
E	ADD D212-682-011B/-111B	CP	09.03.30
D	ADD D212-682-111/-113 AND D412-682-001/-115/-117	PH	08.02.12
C	ADD -021/-025/-035, ADD ARMOR SHIELD	PH	06.10.26
B	ADD D412-682-015	DS	03.06.09
A	NEW ISSUE	DS	01.02.23
REV.	DESCRIPTION		BY DATE
DESIGN	PH	<b>DART AEROSPACE LTD</b> HAWKESBURY, ONTARIO, CANADA	
DRAWN	RF		
CHECKED	#	DRAWING NO.	REV. F
MFG. APPR.	N/A	D212-682	SHEET 1 OF 2
APPROVED	#	TITLE	SCALE
DE APPR.	#	LANDING GEAR KITS	NTS
DATE	11.09.22	COPYRIGHT © 2001 BY DART AEROSPACE LTD THIS DOCUMENT IS PRIVATE AND CONFIDENTIAL AND IS SUPPLIED ON THE EXPRESS CONDITION THAT IT IS NOT TO BE USED FOR ANY PURPOSE OR COPIED OR COMMUNICATED TO ANY OTHER PERSON WITHOUT WRITTEN PERMISSION FROM DART AEROSPACE LTD.	